



DRY FORK CREEK RIVER-WETLAND CORRIDOR RESTORATION



Credit: Evan Barrientos

WHAT THIS PROJECT DOES

North Dry Fork Creek flows through The High Lonesome Ranch near DeBeque, CO. Years of mismanagement of riparian areas and wetlands from prior ranch ownership caused the stream to deepen and become incised, disconnecting it from surface ponds and wetlands that provided a critical water source for the ranch and habitat in this arid landscape. The 2020 Pine Gulch Fire also devastated the ranch and adjacent BLM lands. Audubon is working with the ranch to restore a 1.7 mile reach by installing over 150 hand built structures made of natural materials (a type of restoration work known as low-tech process-based restoration) in the stream channel to slow water and sediment, raise the groundwater table, and re-wet the ponds and wetlands in the floodplain. The project will restore roughly six acres of wetland and 38 acres of floodplain, and replace an undersized culvert with a low ford crossing to improve stream health and ranch operations. This project is one of the first under Colorado's new stream restoration law, SB23-270, to ensure it can improve the stream without requiring water rights administration.

"This project not only provides resilience to the watershed, but it will also establish a seed source of stability that we can work both upstream and downstream from to restore and regenerate this degraded watershed. We believe this project will prove to be replicable and scalable for the thousands of other degraded watersheds across the West." - Travis Brooks, The High Lonesome Ranch general manager

PROJECT BENEFITS

Restoration of North Dry Creek will help the ranch recover from the ongoing impacts from the 2020 Pine Gulch Fire and historic mismanagement of riparian areas and wetlands. The restored riverside wetland habitat and reconnected floodplain will help minimize the impacts of flash floods and debris flows on the ranch by slowing and spreading out high flows in the floodplain. Connected floodplains will also help improve water quality by capturing sediment that previously was flushed downstream. This improved water quality will benefit both the ranch and downstream water users who divert water off North Dry Fork Creek via the Cottonwood Ditch. As the stream system continues to recover, it is possible that late season flows will increase, strengthening water reliability for the ranch and downstream users. Higher water tables will also boost the productivity of these riverside grazing lands, while the restored habitats will benefit birds and wildlife.

PROJECT DETAILS

Project Location: CO-3

Project Cost: \$1,280,589

Funding Award: \$769,587

Funding Programs: CWCB Colorado Watershed Restoration Program, National Fish and Wildlife Foundation RESTORE Program

Partners: The High Lonesome Ranch, Audubon Rockies, Colorado Water Conservation Board, Mule Deer Foundation

Process-based restoration is an important spectrum of restoration work that aims to target the root causes of ecosystem change and restore a river's natural processes so the riverscape can begin to self-heal.

PROTECTING THE COLORADO RIVER AND THE COMMUNITIES THAT DEPEND ON IT

The Colorado River is a resource for 40 million people. It provides drinking water, as well as critical food and energy production. It's an engine for local economies, an irreplaceable habitat for native birds, fish, and wildlife, and an essential part of the Western way of life. But it's on the brink of collapse.

The river is over-allocated, and its two largest reservoirs have fallen to roughly one-third capacity. Decades of drought and rising temperatures threaten the reliability of future water supplies in Colorado River Basin states, putting crucial infrastructure in jeopardy and increasing risks to communities from natural disasters like wildfires and floods.

INVESTING IN THE COLORADO RIVER BASIN'S FUTURE

In order to ensure that the Colorado River can continue to be a reliable source of clean water for communities and agriculture throughout the Basin, we need long-term, sustainable state and federal funding for strategies that make the river more resilient, conserve water, and protect communities from increasingly severe fires, floods, and drought.

HOW TO CREATE A MORE RESILIENT COLORADO RIVER BASIN



Improve forest health using management and restoration strategies designed to protect the forested areas in the Colorado River Basin, such as thinning overgrown areas, removing invasive plant species, and conducting prescribed burns.



Restore wetlands, high-elevation mountain meadows, and riverside habitat to help improve the health of rivers and streams across the Basin, reduce sediment in downstream reservoirs and water infrastructure, improve water security, and enhance forage. Strategies include implementing wood and rock structures to slow river flows, reestablishing native plants, and replenishing groundwater to help protect clean water supplies and restore degraded rivers and streams.



Increase agricultural efficiency and enable farmers to develop strategies that work for them, like supporting on-farm water conservation methods, alternative crops that use less water, and investing in infrastructure upgrades like lining canals.



Boost municipal water conservation by expanding what is already working, like water-efficient plumbing and appliances, leak detection systems, water reuse, replacing thirsty lawns with drought-tolerant landscaping, and incorporating water planning into urban development and growth decisions.

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Scan the QR code to learn more about resilience projects in the Colorado River Basin